

**Technologies** 



# Gluten Kits from Ingenasa at Eurofins Technologies – Gluten Quick

### **Gluten detection in food**

Gluten intolerance is characterized by adverse reactions to gluten, a protein found in wheat, barley and rye. People having celiac disease or gluten sensitivity need to avoid foods and other products that trigger symptoms.

The **SENSISpec INgezim Gluten Quick** is a rapid immunoenzymatic assay which uses the R5 monoclonal antibody specific of Prolamins.

#### Limit of Detection: 3 ppm.

#### Technical basis of the kit

- Plates are supplied coated with R5 monoclonal antibody (MAb) specific for Gliadin, Secalin and Hordein. Samples are added to the wells and incubated.
- If the sample contains the antigen, it will bind to the antibody specific for Gliadin coating the plates.
- When MAb-PO specific of Gliadin is added, it will bind to the antigen of the sample.
- Binding is detected by a colorimetric reaction after the addition of the substrate



#### Application

The test has been designed for samples with a content of Gluten between 0 - 300 ppm. The assay is designed for performing short incubations (20 minutes), for the extraction and analysis.

Assay endorsed by the Codex Alimentarius as Type I Method for the determination of gluten in food samples.

#### Key benefits of the ELISA Kits

- Simple, economical and rapid analysis
- High sensitivity (3 ppm of gluten)
- Does not cross-react with non-toxic prolamins of corn and rice

#### Validation

#### **Reference samples**

Different samples (Spike samples, FAPAS samples and samples with a known content of Gluten) were analysed by both kits: **SENSI**Spec INgezim Gluten and **SENSI**Spec INgezim Gluten Quick.

All the samples were analysed three times by different staff. The average results are showed in the table below.

	Theoretical ppm	<b>Gluten Quick</b>	Gluten
Spike 0 ppm	0	<1,56	<1,56
Spike 20 ppm	20	19	24
Spike 50 ppm	50	50	58
Spike 100 ppm	100	104	114
Spike 200 ppm	200	216	196
Fapas Cake Mix	20.5	22	22
Fapas 20 ppm	20	22	22
M 104 65 ppm	65	66	54
10 ppm A+	10	13	13
100 ppm A+	100	106	105
M 83 21 ppm	21	22	29
M 93 25 ppm	25	26	28
Fapa 2795A	70	71	81

#### **Analytical sensitivity**

The sensitivity of the assay is 3ppm of Gluten (1.5 ppm of Gliadin).

#### Specificity

The specificity of the MAb used in the assay was determined by the immunoblotting technique. The MAb is able to detect specifically the prolamins of gluten present in wheat, rye and barley (gliadin, secalin and hordein respectively).

#### Kit content

- Microtiter plate of 96 wells
- Vial with Negative Control
- European Gliadin Standards (5)
- Vial with PO-Conjugate
- Bottle with Washing Solution
- Bottle with diluent
- Bottle with substrate (TMB)
- Bottle with stop solution
- Bottle with Extraction Solution

Shelf life: 12 months (stored at 4°C)

#### **Ordering information**

Article No.	Product name
30.GL2.K.2.	SENSI Spec INgezim Gluten Quick 96 wells

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